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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,973	07/18/2003	Daniel J. Zillig	58067US002	3008

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EXAMINER

MATZEK, MATTHEW D

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 11/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,973

Applicant(s)

ZILLIG ET AL.

Examiner

Matthew D. Matzek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 and 47-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 and 47-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/8/03, 12/20/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Response to Amendment

1. The Amendment dated 8/24/2005, has been fully considered and has been entered into the Record. Claims 37-46 have been withdrawn and new claims 47-52 have been added. Claims 1-36 and 47-52 are currently active. The prior art rejections have been withdrawn as the applied references fail to teach a pressure-sensitive adhesive impregnated fiber web. No new matter is present in the amended or new claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 48 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to Examiner as what is meant by “spaced from the intermediate plane”.

3. Claim 50 is rejected as it is unclear as to what is meant by “contacts the working surface”. It is Examiner’s interpretation that the “working surface” is the surface to be cleaned, not part of the actual claimed invention. The limitations should only include information relative to the actual invention and not its intended use.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-34, and 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (EP 0822093) in view of Lerner et al. (US 5,198,292).

a. Tanaka et al. disclose a cleaning sheet, which comprises a substrate, a pressure-sensitive adhesive (PSA) layer formed on one or both sides of the substrate, and a porous screen disposed on the PSA layer (Abstract). With both sides of the substrate coated with PSA and a porous screen the article is capable of being used on both faces. The Examiner equates the PSA and substrate to the instantly claimed intermediate layer. As the PSA layer is positioned between the substrate layer and the porous screen the article of Tanaka et al. necessarily has a larger amount of tacky material in the central region than at the opposing faces of the article. The substrate layer immediately adjacent the PSA layer would necessarily be more proximate to the central (adhesive) layer and are coated by the PSA. The fibers at the other face of the same fiber web would be more proximate to the working face and possess a lower coated volume. The cleaning sheet is substantially non-tacky when the cleaning sheet surface is kept in a non-pressed state due to the absence of PSA at the working surface (Abstract).

b. Example 1 of the applied application utilizes a PSA consisting of 2-ethylhexyl acrylate, acrylic acid, and ethyl acetate at a thickness of 30 microns (col. 9, lines 40-48). Using the rule of mixtures the density of the PSA is 0.89695 g/cc, which provides a basis weight of the PSA layer of 26.9 g/m² (calculation done by Examiner).

$$0.89695 \text{ g/cc} = 896,950 \text{ g/m}^3 \text{ (density conversion)}$$

$$896,950 \text{ g/m}^3 * 30 * 10^{-6} \text{ m (thickness)} = 26.9 \text{ g/m}^2 \text{ basis weight of PSA layer}$$

- c. The porous screen may be a non-woven or woven fabric made of polyesters, polypropylenes, and mixtures of these (col. 4, lines 45-58). The PSA may comprise hot-melt PSAs such as synthetic rubbers, silicone rubbers, and natural rubber (col. 4, lines 33-40). Example 1 of the applied application utilizes a PSA consisting of 2-ethylhexyl acrylate, acrylic acid, and ethyl acetate at a thickness of 30 microns (col. 9, lines 40-48).
- d. The instant limitation of claim 1 recites “a tacky material...[at such] a level... [that] the tacky material is greater in the intermediate region than at the working surface” does not preclude a working surface devoid of said tacky material as demonstrated by Tanaka et al.
- e. The article of Tanaka et al. is silent as to the use of a PSA impregnated fiber web for use in place of a PSA coated sheet.
- f. Lerner et al. teach a tack cloth comprising PSAs such as acrylic, styrene butadiene rubber, vinyl acetate and 2-ethyl hexyl acrylate (Abstract and col. 2, line 20). The PSA is continuously coated on the fibers of the cloth (Abstract). Polyester and polypropylene fibers may be used to make the tack cloth (col. 5, lines 9-13). The fibrous tack cloth is not limited to nonwoven fabrics and specifically encompasses woven and knitted fabrics (col. 6, lines 18-21). While nonwoven, entangled web is still wet it is impregnated with the PSA (col. 5, line 67-col. 6, line 2). The wet state of the fabric assists in wicking the PSA throughout the entire cloth (col. 6, lines 9-12). The applied invention is directed to be neither “too sticky” nor “too slippery” (col. 5, lines 48-53).

g. Since Tanaka et al. and Lerner et al. are from the same field of endeavor (i.e. tacky cleaning cloths comprising PSA), the purpose disclosed by Lerner et al. would have been recognized in the pertinent art of Tanaka et al.

h. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to replace the intermediate layer of Tanaka et al. with the tack cloth of Lerner et al. with the motivation to create a adhesive layer that has high surface area and volume in which to acquire particles, dirt, etc.

i. Claim 3 is rejected as the intermediate layer comprises PSA, but the porous screen (working surface) does not. Claim 5 is rejected as the intermediate layer serves as the first section and the porous screens serve at each face serve as section 2. Claim 21 is rejected as the applied article may comprise a porous screen at each face (first and second fiber web layers).

j. Claim 6 is rejected as randomly distributed fibers are anticipated by the teaching of nonwoven webs. Claim 11 is rejected as neither PSA nor detackifying agent is present at the working face.

k. Claim 47 is rejected as the fibrous web of Lerner et al. is made of a plurality of fibers and the PSA continuously coats them (Abstract). Claim 48 is rejected as a portion of the fibers on the outer edge of the fabric are spaced away from the intermediate plane.

l. Although Tanaka et al. do not explicitly teach the claimed feature of the instantly claimed drag values, it is reasonable to presume that said property is inherent to Tanaka et al. Support for said presumption is found in the use of like materials (i.e. [a cleaning sheet, which comprises a substrate, a pressure-sensitive

adhesive (PSA) layer formed on one or both sides of the substrate, and a porous screen disposed on the PSA layer]). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of the instantly claimed drag values would obviously have been present one the Tanaka et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

m. Reliance upon inherency is not improper even though rejection is based on Section 103 instead of Section 102. *In re Skoner*, et al. (CCPA) 186 USPQ 80.

5. Claims 35-36 and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (EP 0822093) in view of Lerner et al. (US 5,198,282) and as applied to claim 1 above, and further in view of Truong et al. (EP 1238621). Tanaka et al. and Lerner et al. are silent as to the inclusion of a multi-layered (i.e. three) intermediate layer.

a. Truong et al. disclose a double-sided cleaning implement comprising a reversible cleaning pad including first and second sides of cleaning web material (Abstract). The first and second layers are made of a cleaning web material such as a woven cloth web comprising microfibers, preferably microfibers of polyester and nylon [0039]. The cleaning pad may be composed of three or more layers, wherein the first and second layers form the outer layer [0029]. The two layers of the cleaning web 21, 22 of Figure 7 are approximately equal in thickness. Therefore, it is reasonable to presume or it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the three-

layered article of Truong et al. with three equally thick layers motivated by the desire for the all facets of the cleaning web to have equal cleaning ability.

b. Since Tanaka et al., Lerner et al., and Truong et al. are from the same field of endeavor (i.e. cleaning pads), the purpose disclosed by Truong et al. would have been recognized in the pertinent art of Tanaka et al. and Lerner et al.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have made the invention of Tanaka et al. with a multi-layered (i.e. three) intermediate layer and with the Drag Values of Truong et al. The skilled artisan would have been motivated to combine the PSA impregnated cloth of Lerner et al. and the multi-layered article of Truong et al to yield an article with increased surface area and even greater volume in which to acquire particles, dirt, etc.

c. Claim 35 is rejected as the cleaning web of Truong et al. comprises two cleaning webs [0029]. The first and second cleaning web materials may be any selected material, but the two layers are preferably different materials [0030].

d. Claim 50 is rejected as the intermediate level, impregnated fabric is in contact with the porous screen on each face of the article of Tanaka et al. As the article is used and pressure is applied to said article the adhesive layer is exposed and removes the fouling substances with which it comes in contact (col. 7, lines 42-44, Tanaka et al.).

Response to Arguments

6. Applicant's arguments with respect to claims 1-36 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mdm



**NORCATORRES
PRIMARY EXAMINER**